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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,606	12/23/2003	Yuh Cheng	MTKP0055USA	1605

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NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION  
P.O. BOX 506  
MERRIFIELD, VA 22116

EXAMINER
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NGUYEN, LINH THI

ART UNIT	PAPER NUMBER
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2627

MAIL DATE	DELIVERY MODE
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01/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Supplemental  
Notice of Allowability**

Application No.

10/707,606

Examiner

Linh T. Nguyen

Applicant(s)

CHENG, YUH

Art Unit

2627

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☐ The allowed claim(s) is/are \_\_\_\_\_.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance             |
|  | 9. <input type="checkbox"/> Other _____   |

WAYNE YOUNG  
ADVISORY PATENT EXAMINER

## DETAILED ACTION

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Winston Hsu on December 7, 2006.

The specification should be amended as follows:

On paragraph [0052], page 24, lines 11-12, the equation should be

----  $A1 = G_{hp1}(a + c)$ , where  $G_{hp1}$  ----

On paragraph [0052], page 25, lines 1-7, the equation should be

---- The corresponding operation formula is:  $A2 = G_{hp2}(b + d)$ , where  $G_{hp2}$  is the transformation function of the second high-pass filter 83 ( $G_{hp2}$  can be the same as or different to  $G_{hp1}$ ). ----

On paragraph [0053], page 27, lines 5-10, the equation should be

----  $AR = f(A1, A2, \Delta\tau) = G_{eq}(A1 + A2) = \left| G_{eq} \right| e^{js\Delta\tau} (A1 + A2)$ , where  $G_{eq}$  is the transformation function the equalizer 89, and  $\Delta\tau$  ----

On paragraph [0054], page 29, lines 7-9, the equation should be

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----  $TE = G_{lpf}(DC1 - DC2)$ , where  $G_{lpf}$  ----

On paragraph [0058], page 32, lines 12-14, the equation should be

----  $A1 = G_{hp}(a)$ ;  $A2 = G_{hp}(b)$ ;  $A3 = G_{hp}(c)$ ; ----

On paragraph [0058], page 33, lines 1-3, the equation should be

----  $A4 = G_{hp}(d)$ , where  $G_{hp}$  ----

On paragraph [0059], page 33, line 6, the equation should be

$$ASR = f(A1, A2, A3, A4, \Delta\tau) = G_{eq}(A1 + A2 + A3 + A4) = |G_{eq}|e^{js\Delta\tau}(A1 + A2 + A3 + A4)$$

On paragraph [0059], page 34, lines 1-3, the symbol should be

----  $G_{eq}$  is the transformation function of the equalizer 109 and  $\Delta\tau$  ----

On paragraph [0062], page 37, lines 9-11, the equation should be

----  $TE = G_{lpf}(DSC1 - DSC2 + DSC3 - DSC4)$ , where  $G_{lpf}$  ----

On paragraph [0064], page 38, line 10, the equation should be

----  $A1 = G_{hp}(a)$ ; ----

On paragraph [0064], page 39, lines 1-5, the equation should be

----  $A2 = G_{hp}(b)$ ;  $A3 = G_{hp}(c)$ ;  $A4 = G_{hp}(d)$ , where  $G_{hp}$  ----

On paragraph [0066], page 43, lines 7-9, the equation should be

----  $TE = G_{lpf}(DC1 - DC2 + DC3 - DC4)$ , where  $G_{lpf}$  ----

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh T. Nguyen whose telephone number is 571-272-5513. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LN  
December 7, 2006

  
WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER